



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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October 10, 1996

TO: Board of Oil, Gas and Mining

THRU: Lowell P. Braxton, Deputy Director *LOB*

FROM: Mary Ann Wright, Associate Director of Mining *M. A. Wright*

RE: Request for Board Approval, Amount and Form of Revised Reclamation Surety, Uintah County Commission, Uintah County Asphalt Mine, M/047/022, Uintah County, Utah

The Division received a Notice Of Intention to Revise Mining Operations from Uintah County on June 10, 1996. Using the Division's policy for defining amendments and revisions, this proposal has been categorized as an amendment. After receiving additional information, the Division has determined the proposal, to expand 10 acres, to be technically adequate.

The reclamation surety amount estimated by the Division for this operation is \$146,400 in year 2001 dollars. Currently, there is no surety in place for this operation, only a 1989 letter from former Board Chairman Williams to the Uintah County Commission. Uintah County proposes a written self-bonding agreement with the Board (see Rule R647-4-113.4.16). At this time the Division is awaiting receipt of financial information from Uintah County. The Division will review this financial information and make a recommendation to the Board concerning self-bonding by Uintah County at the October hearing.

Attached for your review and consideration are copies of the following documents:

1. Summary checklist
2. Location map
3. Executive summary
4. Reclamation surety estimate
5. Reclamation Contract (Form MR-RC)
6. Self Bond Proposal - (*forthcoming in supplemental mailing*)
7. Minerals Rule R647-4-113. Surety.
8. Package of legal opinions and 1989 letter from Board.

Thank you for your time and consideration of this matter.

jb  
Attachments  
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## DOGM MINERALS PROGRAM

### Checklist for Board Approval of FORM AND AMOUNT OF SURETY

Prepared October 10, 1996

Company Name: Uintah County Commission  
Mine Name: Uintah County Asphalt Mine  
File No.: M/047/022

Items	Provided		Remarks
	Yes	No	
Location Map	X		
Executive Summary	X		
Reclamation Bond Estimate	X		
Signed Reclamation Contract	X		Draft - Original to be provided by Board Hearing date
Signed Power of Attorney/ Affidavit of Qualification		X	N/A
Bond/Reclamation Surety	X		Self Bond - Information to support continued self bonding forthcoming
Surety Sign Off (Other State/Federal Agencies)		X	N/A
RDCC contacted		X	N/A for amendments

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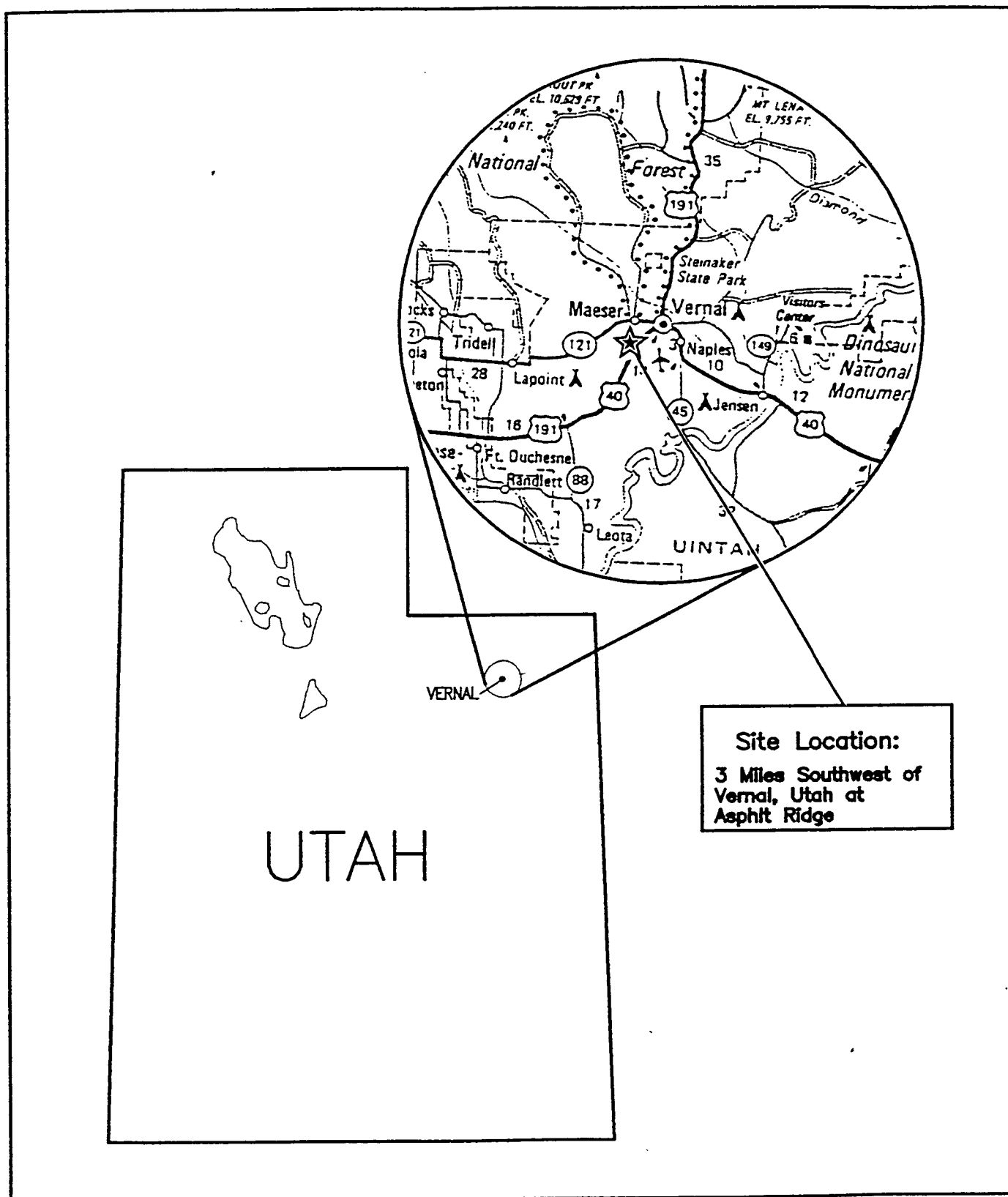


Figure 1. Site Location in relation to the State of Utah

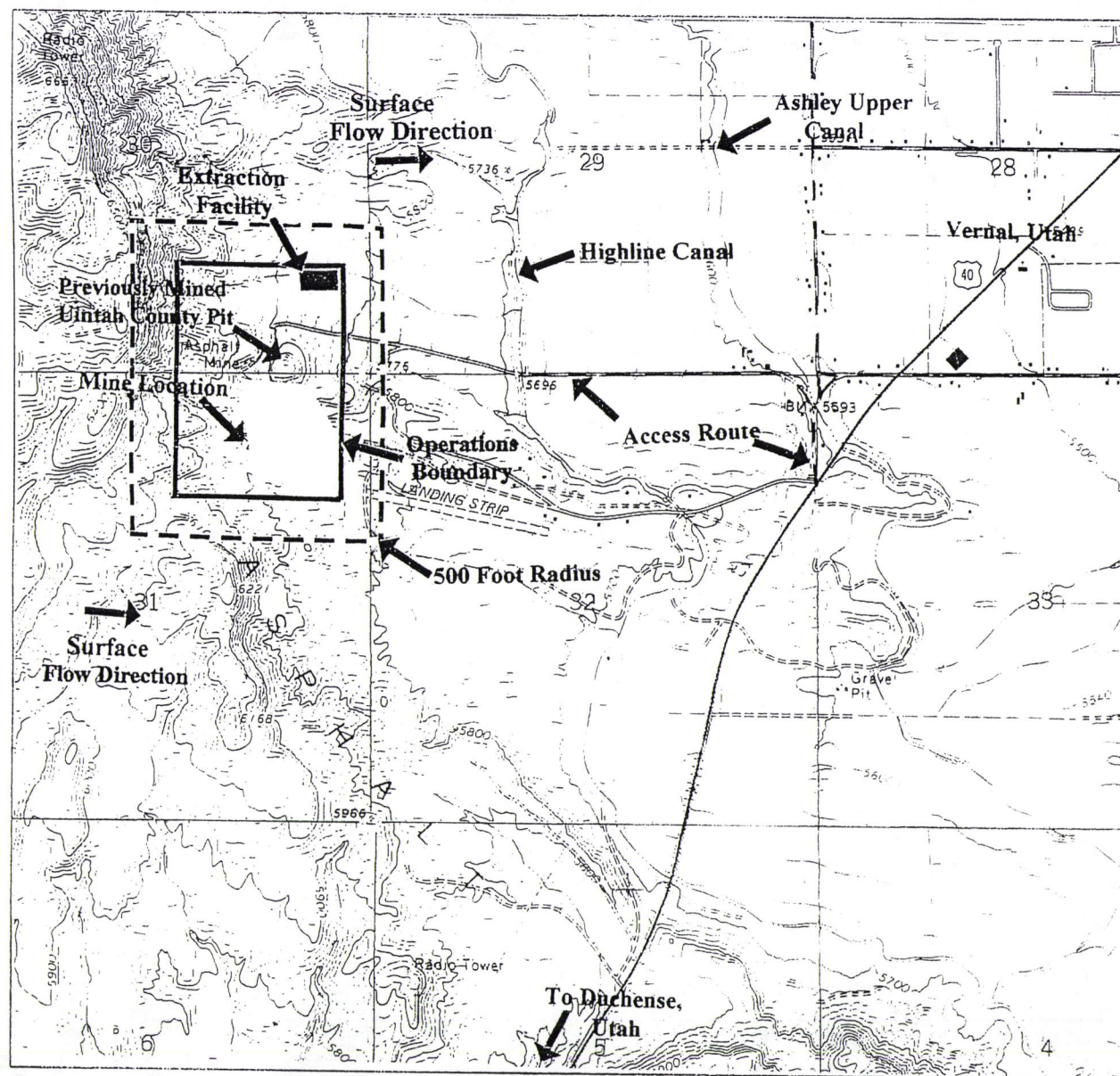




UINTAH COUNTY COMMISSION

ASPHALT RIDGE, UTAH

TOPOGRAPHIC BASE MAP



### LEGEND

	CANALS
	INTERMITENT STREAM
	US HIGHWAY 40
	SECONDARY HIGHWAY
	LIGHT DUTY ROAD
	UNIMPROVED ROAD
	LANDING STRIP
	TOPOGRAPHIC CONTOURS
	SECTION, TOWNSHIP BORDERS
	BUILDINGS
	LEASE BOUNDARY
	500 FT RADIUS

SCALE

1" = 2000 FT

REFERENCE: ADAPTED FROM THE USGS QUADRANGLE ENTITLED VERNAL, UTAH-1978

PROJECT # 95059

FIGURE 2

## EXECUTIVE SUMMARY

Prepared October 8, 1996

Mine Name: Uintah County Asphalt Mine  
Operator: Uintah County Commission  
147 East Main  
Vernal, Utah 84078  
Telephone: (801) 789-1070  
Contact Person: Lonnie Hogan

I.D. No.: M/047/022  
County: Uintah  
New/Existing: Existing  
Mineral Ownership: Private  
Surface Ownership: Private  
Lease No.(s): N/A  
Permit Term: Life of Mine

Life of Mine: 10+ years as of this amendment

Legal Description: Amendment Area: N1/2 N1/2 NE1/4 of Section 31, Existing Operation: S1/2 SE1/4 of Section 30 Township 4 South, Range 21 East

Mineral(s) to be Mined: Asphalt/Tar Sands

Acres to be Disturbed: Permit Amendment area is approximately 10 acres. The total disturbed area including this amendment is approximately 80.5 acres.

Present Land Use: Mining

Postmining Land Use: Wildlife habitat

Variances from Reclamation Standards (Rule R647) Granted: None for this permit amendment. The existing permit included these variances: M-10(3) Impoundments - to allow the pit to impound water after final reclamation. M-10(5) Highwalls - to allow the existing highwalls to remain steeper than 45 degrees, and to allow the highwalls to remain without backfilling. M-10(8) Roads & Pads - to allow the main access road to the mine to remain. M-10(14) Soils - no soils were removed or segregated during the 50 year operation of the mine. This soils variance was limited to those areas previously disturbed and to outcrops and excessively steep terrain where removal would be impractical. Areas yet undisturbed (August 25, 1988) by the mining operations will not be covered by this soils variance.

### Soils and Geology

Soil Description: Affected area is within previously disturbed lands and the Clapper Gravelly Loam soil type. This soil type is rated as fair for revegetation.

pH: 7.6

Special Handling Problems: None

Geology Description: Stratigraphy rocks in the vicinity of the pit include the Cretaceous Mesa Verde group, the Tertiary Duchesne River Formation, and the Quaternary colluvium and alluvium (in ascending order of occurrence). These occur as slope cover and valley fill on the Duchesne River Formation in the western part of the study area. They contribute to the volume of overburden overlying the tar sand. The oldest rocks in the pit are assigned to the Mesa Verde Group. They consist predominately of a fine to medium grained cross-bedded sandstone that is probably part of the Rim Rock sandstone. The eastern part of the study area is everywhere underlain by this. The Mesa Verde group sandstones are immediately overlain with variegated

beds of the Duchesne River Formations. The contact between the older Cretaceous sequence and Duchesne River Formation is an angular unconformity [break in the geologic record] that is well exposed along the western highwall just above the 5,900 foot level in the tar sand pit. This surface is undulatory at least on the order of a few feet. It in turn is overlain by the Brennan Basin Member of the Duchesne River Formation which consists in the pit of friable [ebble to cobble conglomerate, sandstone, and mudstone. Rocks within the tar sand pit are cut by both northwest and northeast trending faults. At least 150 feet of displacement has occurred at the fault along the northeast margin of the study area.

### **Hydrology**

**Ground Water Description:** Mining has reached the base of the tar sands formation and no ground water has been encountered during the mining operations. The tar sand formation dips to the south-southwest away from any known wells. Therefore, there is no potential for intercepting or impacting any ground water resources. The Division of Water Quality has issued a Permit-By-Rule letter eliminating the requirement for a ground water discharge permit. There are no wells, pipelines, or boreholes within 500 feet of the lease property boundary.

**Surface Water Description:** There are no bodies of water within 500 feet of the site. There are small ephemeral creeks near the mine site and the proposed Buena Ventura Resources Corporation extraction facility. Any surface water from off site will be diverted away from the site by the use of berms. Any surface water on site will be collected in a sump at the bottom of the pit and used for dust control or pumped to the extraction facility.

**Water Monitoring Plan:** The facility is a closed loop "Non-discharging Facility" and therefore no surface water monitoring will be required. No ground water resources have been identified, therefore, no ground water monitoring will be required.

### **Ecology**

**Vegetation Type(s); Dominant Species:** Sagebrush community is dominated by wyoming big sage, indian ricegrass and galleta grass. The Pinyon/Juniper woodland is dominated by pinyon pine, utah juniper, wyoming big sagebrush and galleta grass.

**Percent Surrounding Vegetative Cover:** Sagebrush community - 56.4%; Pinyon/Juniper woodland - 41.2%

**Wildlife Concerns:** None

**Surface Facilities:** The existing operations include very few facilities or structures. These facilities include the following: a small shack/scale house, a truck scale, a temporary fuel tank, a temporary crusher, and a gravel stockpile area located on a state lease to the north (this state lease area was not included as part of the mine disturbance because it is considered a gravel site)

### **Mining and Reclamation Plan Summary:**

#### **During Operations:**

AMENDMENT AREA - River bed gravels disseminated throughout a superficial layer of plant growth medium in the amendment area will be screened, crushed and utilized for road paving operations. The County will segregate and stockpile the fines portion of this gravelly layer in the "top soil" stockpile for eventual reclamation. The hard cap rock which overlies the tar sands will be ripped and stored in the overburden berm east of the pit in an effort to provide a drainage and visual barrier separating the mining operations from adjoining land users. Overburden will be pushed east and north to establish a working area for the pit amendment area. As additional overburden is stripped from the deposit, the berm will be extended to the north where it will be stored for future use in recontouring the disturbed areas when the ore deposit is depleted. Sediment and erosion control measures implemented in the berm area will include low angle slopes (2h:1v) to minimize erosion, berms surrounding the stock pile to collect any run-off or erosion, broadcast reseeding and/or placement of rock riprap. All water collected within the pit and the area of exposed tar sands will be collected and used within the pit for asphalt mixing, dust control on the haul roads, or used by the proposed BVRC extraction facility.

If available, a D-10 Caterpillar dozer will be used to rip and remove overburden and the tar sands deposits; if the dozer cannot be utilized, the traditional methods of drilling and blasting will be used to remove the cap rock/overburden.

#### **After Operations:**

All trash will be removed. Scrapers and bulldozers will be used to replace overburden and recontour the pit to stable slopes. One to two feet of suitable topsoil material will be redistributed to the areas to be reseeded. The seed mixture recommended by DOGM will be used. Seeding will be by rangeland drill for grasses and forbs; broadcasting for shrubs. All planting will be in the fall. Fertilization will be used in the spring the third year after planting.

Because of the scarcity of top soil in the pre-mining area, reclamation may be limited to areas where adequate topsoil and moisture are available to support sustained revegetation. Reclamation activities will be concentrated where the maximum benefits such as site buffering, erosional control, and aesthetics will be achieved. Programs to augment natural top soil with recycled composts, sewage sludge or agricultural waste will be explored if cost effective.

If the Buena Ventura operations are approved, clean waste sand will be available to backfill the County pit. If and when the Buena Ventura Resources Corporation Large Mine Plan is approved, that plan will supersede this plan for future operations in the area.

#### **Surety**

Amount: \$146,400

Form: Self Bond (proposed)

Renewable Term: 5 years

**RECLAMATION ESTIMATE****DRAFT**

Uintah County

last revision

**08/13/96**

Asphalt Mine - June 1996 Amendment

Uintah County

M/047/022

filename M47-22.WB2

page "amend1996"

Prepared by Utah State Division of Oil, Gas &amp; Mining

**SUMMARY OF ALL UINTAH COUNTY ASPHALT PERMIT AREAS  
AMENDED TO THE PERMIT AS OF THIS DATE**

AREA R-1	8.33 acre			
	SUBTOTAL R-1		\$6,462	
AREA R-2	7.02 acre			
	SUBTOTAL R-2		\$5,992	
AREA R-3	18.1 acre			
	SUBTOTAL R-3		\$41,725	
AREA R-4	11.84 acre			
	SUBTOTAL R-4		\$10,924	
AREA R-5	17.25 acre			
	SUBTOTAL R-5		\$17,543	
AREA R-6 (1993 amendment)	8.00 acre			
	SUBTOTAL R-6		\$6,412	
AREA R-7 (1996 AMENDMENT)	10.00 ACRE			
	SUBTOTAL R-7		\$14,619	
Equipment mobilization	4 equip	1,000	4,000	(6)
Project supervision	5 week	1,900	9,500	(7)
	SUBTOTAL		117,177	
	+ 10% CONTINGENCY		11,718	
	SUBTOTAL		128,894	
	+5yr ESCAL (2.58%)		17,508	
	TOTAL		\$146,402	
<hr/>				
	<b>ROUNDED TOTAL IN 2001-\$</b>		<b>\$146,400</b>	
Average cost per disturbed acre =	1,818	\$/acre		
Total disturbed acreage =	80.5	acre		
Total permit acreage =	89.0	acre		



# RECLAMATION ESTIMATE

DRAFT

Uintah County

last revision

08/13/96

Asphalt Mine - June 1996 Amendment

Uintah County

M/047/022

filename M47-22.WB2

page "amend1996"

Prepared by Utah State Division of Oil, Gas & Mining

## Reclamation Details

**-This page is for the amendment received June 10, 1996 ONLY**

-Present acreages: R-1 (8.3), R-2 (7.0), R-3 (18.1), R-4 (11.8), R-5 (17.3), R-6 (16.5)

-June 1996 amendment increases the disturbed area by 10 acres

-Productivity levels and times taken from the 1988 estimate when possible

-Reclamation tasks for the amendment area were assumed to be similar to R-4 area

-Use a seed mix cost of 95 \$/acre

-Use a D8N dozer for earthwork at 201 \$/hr

-Use a fertilizer cost of 0.41 \$/lb

-Use a drill seeding cost, including mulch, of 150 \$/acre

-Use a broadcast seeding cost, including mulch, of 140 \$/acre

-Use a monitoring cost per area (1 day/yr, 3 yrs) 600 \$/area

-USE a cleanup cost (1 hr/acre) of 15 \$/hr

-ASSUME: mobilization of 1 dozer; 1 FE loader, 1 truck, 1 tractor

## AREA R-7 (1996 amendment area)

10 acre

Description	Amount	\$/Unit	Cost-\$
Earthwork (600 CY/hr) ASSUME	54 hr	201	10,809
Discing (4.35 acre/hr)	2 hr	201	462
Drill seeding (2.18 acre/hr)	5 hr	150	688
Broadcast seeding-truck (4.8 acr	1 hr	140	140
Seed Mix	10 acre	95	950
Fertilizer (200 lb/acre)	2,000 lb	0.41	820
General area cleanup	10 hr	15	150
Monitoring (1 day/yr for 3 yrs)	1 area	600	600

SUBTOTAL R-7

\$14,619